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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/654,377	09/03/2003	Luciano M. Parrinello	1748P1	4183

7590 03/15/2006

PPG Industries, Inc.
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EXAMINER

SASTRI, SATYA B

ART UNIT PAPER NUMBER

1713

DATE MAILED: 03/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/654,377

Applicant(s)

PARRINELLO ET AL.

Examiner

Satya B. Sastri

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-96 is/are pending in the application.
- 4a) Of the above claim(s) 24-61 and 63-96 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 and 62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-96 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to applicant's amendment filed on January 30, 2006. *Claims 1-96* are now pending in the application with *claims 24-61, 63-96* withdrawn from further consideration as being drawn to non-elected invention.

2. Applicants' arguments have been fully considered but not found persuasive and therefore, the rejection of *claims 1-23, 62* under 35 U.S.C. 103(a) as being unpatentable over Naik et al. (US 6,866,383 B2) in view of Schliesman et al. (US 6,656,545 B1) is sustained. The rejection of *claims 1-23, 62* under 35 U.S.C. 112, second paragraph, as being indefinite has been withdrawn.

Response to Arguments

3. Applicants' argue that the prior art To Naik et al. and Schliesman et al. disclose compositions that include a porous filler. It is noted that the instant claims include the transitional phrase "comprising" that does not necessarily exclude other components such as fillers. Secondly, as for the motivation to combine references, instant claims recite compositions comprising an aqueous polyurethane dispersion, a cationic nitrogen-containing polymeric dye fixative compound and an acrylic polymer wherein the composition has a pH of 7 or less. The composition is clearly taught by the primary reference and the motivation to maintain a pH of 7 or less is clearly provided by the secondary reference. As stated in the earlier office action, the secondary reference to Schliesman et al. discloses that low pH values of 4.5 to 7.5 are useful in

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improved ink holdout (column 1, lines 50-60). The prior art explicitly teaches that cationic fixing agents are effective at low pH conditions (4.5 to 7.5), but become less effective at alkaline pH values (column 4, lines 19-52). With regard to the binder, secondary reference includes polyvinyl alcohol and other compatible latexes while the primary reference includes polyurethane and polyacrylic dispersions. The binders in both references are functionally equivalent and given that the fixing agent is cationic nitrogen-containing polymeric in both references, the low pH values would be desirable in compositions disclosed by Naik et al. as well for improved ink holdout as taught by Schliesman et al.

4. With regard to the applicant's arguments that the combined references of Naik et al. and Schliesman et al. "do not disclose not suggest the use of polyurethane dispersion in combination with a dye fixative and acrylic polymer for the purpose of rendering a microporous substrate substantially water-resistant", the composition is clearly taught by the prior art references. Thus, all the advantages of the composition must inherently be present when coated on a substrate, including rendering a microporous substrate substantially water-resistant. With respect to the preamble, the intended use language (such as substantially water-resistant ink jet recordable substrate coating composition) must result in a structural difference to patentably distinguish over the prior art. If the prior art structure or composition is capable of performing the intended use, then it meets the claim. MPEP 2112.02. The preamble of the instant claims merely shows the environment in which the composition operates.

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Action Is Final

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Future Correspondence

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satya Sastri whose telephone number is 571-272-1112.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone numbers for the organization where this application or proceeding is assigned is (571) 273-8300 for regular communications. The unofficial direct fax phone number to the Examiner's desk is 571-273-1112.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



SATYA SASTRI

March 13, 2006



DAVID W. WU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700